



US 20210109568A1

(19) **United States**(12) **Patent Application Publication**
CURRAN et al.(10) **Pub. No.: US 2021/0109568 A1**(43) **Pub. Date: Apr. 15, 2021**(54) **TITANIUM PARTS HAVING A BLASTED SURFACE TEXTURE**(71) Applicant: **Apple Inc.**, Cupertino, CA (US)(72) Inventors: **James A. CURRAN**, Sunnyvale, CA (US); **Sonja R. POSTAK**, Sunnyvale, CA (US); **Todd S. MINTZ**, San Jose, CA (US)(21) Appl. No.: **17/127,948**(22) Filed: **Dec. 18, 2020****Related U.S. Application Data**

(62) Division of application No. 16/584,692, filed on Sep. 26, 2019, now Pat. No. 10,901,458.

(60) Provisional application No. 62/737,669, filed on Sep. 27, 2018.

Publication Classification(51) **Int. Cl.****G06F 1/16** (2006.01)**C25D 11/02** (2006.01)**C25D 11/26** (2006.01)**H05K 5/00** (2006.01)(52) **U.S. Cl.**CPC **G06F 1/1626** (2013.01); **C25D 11/022** (2013.01); **H05K 5/04** (2013.01); **H05K 5/0086** (2013.01); **C25D 11/26** (2013.01)

(57)

ABSTRACT

This application relates to an enclosure for a portable electronic device. The enclosure includes a titanium substrate having a textured surface that includes peaks separated by valleys, where the textured surface is characterized as having (i) an S_dq (root mean square gradient) that is greater than 0.2 micrometers, and (ii) a gloss value that is greater than 90 gloss units as measured at 60 degrees by a gloss meter.

